

A FAMILY OF SEQUENCES OF BINOMIAL TYPE

Wojciech Młotkowski
Anna Romanowicz

Abstract: For a delta operator $aD - bD^{p+1}$ we find the corresponding polynomial sequence of binomial type and relations with Fuss numbers. In the case of $D - \frac{1}{2}D^2$ we show that the corresponding Bessel–Carlitz polynomials are moments of the convolution semigroup of inverse Gaussian distributions. We also find probability distributions ν_t , $t > 0$, for which $\{y_n(t)\}$, the Bessel polynomials at t , is the moment sequence.

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